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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,019	08/28/2003	Paolo Rolandi	856063.752	8407

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EXAMINER

TRAN, MICHAEL THANH

ART UNIT PAPER NUMBER

2827

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/651,019

Applicant(s)

ROLANDI ET AL.

Examiner

Michael t. Tran

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 28, 2003 - December 14, 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-34 is/are allowed.
- 6) ☒ Claim(s) 1,35 and 39 is/are rejected.
- 7) ☒ Claim(s) 2-10,36-38 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119


- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____


MICHAEL TRAN
EXAMINER

DETAILED ACTION

1. In response to the Communications dated August 28, 2003 through December 14, 2004, claims 1-40 are active in this application.

Claim Objections

2. Claims 2-10, 36, 38, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

It appears that the dependency of claim 37 is in error.

Claim Rejections – 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claim 1 is rejected under 35 U.S.C 102(b) as being anticipated by Tedrow et al. [U.S. Patent #5,497,119].

With respect to claim 1, Tedrow et al. disclose a method for controlling programming voltage levels of non-volatile memory cells, the method comprising: providing a resistive divider [525 of figure 5] connected to a programming voltage reference [output via 503 of figure 5] and effective to generate at least one programming voltage level [various output levels via V.sub.out of figure 5]; providing a reference cell [515 of figure 5] crossed by a cell current; and wherein cell current is applied to the resistive divider to correlate the programming voltage level to intrinsic features of the reference cell.

5. Claim 35 is rejected under 35 U.S.C 102(b) as being anticipated by Tedrow et al. [U.S. Patent #5,497,119].

With respect to claim 35, Tedrow et al. disclose an apparatus to control programming voltage levels of non-volatile memory cells, the apparatus comprising: a reference cell [515 of figure 5] to generate a cell current representative of intrinsic features of the reference cell; a circuit block [503 of figure 5] having an input terminal coupled to the reference cell to receive the cell current and having an output terminal to provide an output voltage that can change in response to a change in the cell current; and a resistive divider [525 of figure 5], coupled to the output terminal of the circuit block, to receive the output voltage and to generate at least one programming voltage level value therefrom that is correlated to the intrinsic features of the reference cell.

6. Claim 39 is rejected under 35 U.S.C 102(b) as being anticipated by Tedrow et al. [U.S. Patent #5,497,119].

With respect to claim 39, Tedrow et al. disclose a system for controlling programming voltage levels of non-volatile memory cells, the system comprising: a means [515 of figure 5] for providing a cell current representative of intrinsic features of a reference cell; a means [503] of figure 5] for applying the cell current to a resistive divider; and a means [525 of figure 5] for generating at least one programming voltage level value from the resistive divider based on the applied cell current, the programming voltage level value being responsive to a change in the cell current and being correlated to the intrinsic features of the reference cell.

Allowable Subject Matter

7. Claims 11-34 are allowable over the prior art of record.

8. The following is an Examiner's statement of reasons for the indication of allowable subject matter: the prior art of records does not show (in addition to the other elements in the claim) the following:

- Wherein the output terminal of the input stage is connected to a first circuit node of the resistive divider in correspondence with an end of a resistive element included in the resistive divider and having a further end connected to the programming voltage reference, a voltage value on the first circuit node being thus obtained by shunting the programming voltage reference.

Conclusion

9. When responding to the Office action, Applicants are advised to provide the Examiner with line and page numbers of the application and/or references cited to assist the Examiner in the prosecution of this case.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael T. Tran whose telephone number is (571) 272-1795. The Examiner can normally be reached on Monday-Thursday from 7:30-6:00 P.M.

11. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1650.



Michael T. Tran
Art Unit 2827
March 8, 2005

MICHAEL TRAN
PRIMARY EXAMINER